EOCR-SS Electronic Overload Relay

- Overload and Phase Loss Protection
- Independently adjustable starting and Trip Delay
- Visual Current Setting Aid & Trip Indication(LED)
- Flexible Power Supply(90 to 260VAC or 320 to 480VAC)
- Fail Safe Protection(N type)
- Electronic Shear-pin function

Description

Two of three phase motor currents are monitored by current transformers. External CTs are required for currents more than 60Amps. The internal solid state circuitry compares with the preset current level. When load currents exceeds the preset trip level, red LED illuminates, and after the preset time, the device trips, and changes internal SPDT relay contacts. Red LED remains illuminated indicating an overload trip has occurred. Until manual or remote electrical reset by interrupting supply, is initiated.

If load current falls off below setpoint before the preset delay, device resets trip timer. With the visual aid of LED, flashing at 100% of preset load, actual load currents can be determined without the aid of Ammeter. TEST button provides the means of testing service-worthiness and integrity of the device. Internal relay is energized in normal operation condition(fail-safe) and will not become ready mode with either supply lost or own failure.

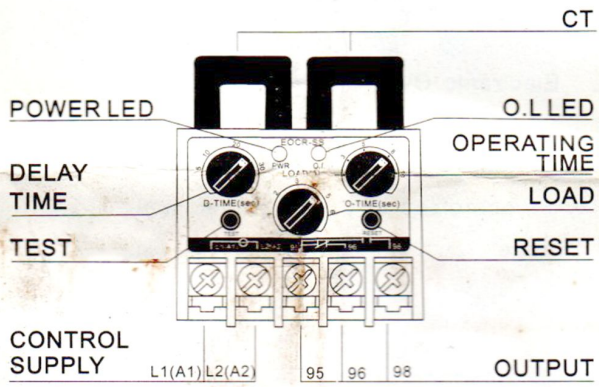
Starting delay time range : 0.2-30 seconds.

Trip delay time range : 0.2-10 seconds. May be used as electronic shearpin by setting trip time to minimum.

How to set up

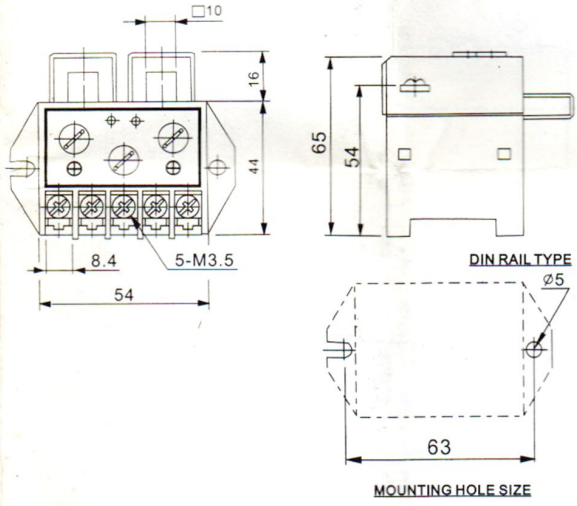
1) When commissioning, set start delay time(D-Time knob) to known motor run-up time, or to the maximum, If not known.
2) Set trip delay time(O-Time knob) to desired trip time.
3) Set load currents(LOAD knob) at the rated full load or desired currents.
4) With connections made and control power on, depress TEST button and hold. Verify the red LED illuminates and the internal relay should switch contacts after the sum of D-Time and O-Time. Depress RESET button.
5) Start the motor and notice run-up time. Then, slowly turn the LOAD knob CCW, until the LED flashes, where the 100% of the actual load currents is indicated. Set the LOAD knob to the desired trip currents. 110~125% setting of running current is recommended.
6) Reset D-Time knob setting to normal run-up time.
7) Periodic testing of TEST button is recommended to ensure the full protection and regularly as a Preventive Maintenance.

Construction



95=Tc, 96=Tb, 98=Ta

Dimensions



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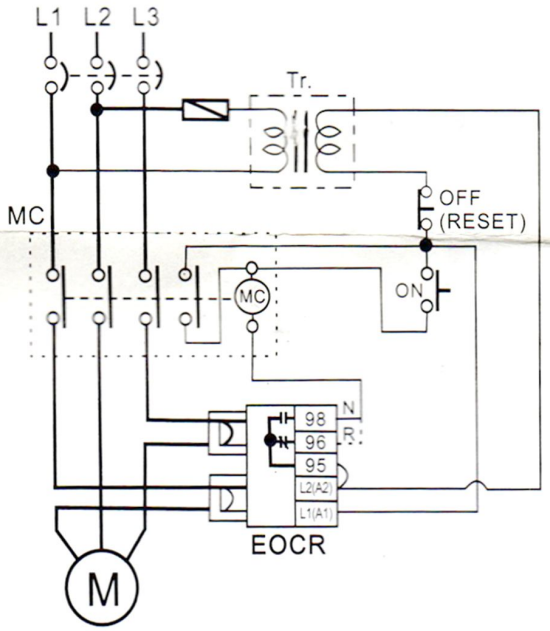
Specifications

MODEL	EOCR-SS		
Current Range	05) 1-5A 30) 5-30A 60) 5-60A Over 60A to 800A, 05 fitted w/external CTs		
Operating Time	D-TIME		0.2 - 30 seconds
	O-TIME		0.2 - 10 seconds
Accuracy	Current		±10%
	Time		±15% of max. time set value
Time Characteristics	Definite Time		
Control Voltage	220) Voltage Free(90~260)VAC, 50/60Hz 440) Voltage Free(180~480)VAC, 50/60Hz Other Voltage optional.		
Rated Voltage	600VAC,50/60Hz		
Current Sensing	2 CTs		
Output Contacts	Contacts		SPDT 3A/250VAC resistive
	Condition	N Type	Normally energized(95 ⊣⊢ 98 close)
		R Type	Normally de-energized(95 ⊣/⊢ 96 close)
Reset	Manual or remote electrical by interrupting supply		
Environment	Temp.	Run	-20 ~ 60 deg. ℃
		Store	-30 ~ 80 deg. ℃
	Humidity		30 ~ 85% RH, Non-condensing
Insulation	Between casing and circuits : over10 MOhms with DC500V megger		
Dielectric Strength	1)Between casing and circuits : AC 2000V, 60Hz, 1 min 2)Between contacts : AC 1000V, 60Hz, 1 min 3)Between circuits : AC 2000V, 60Hz, 1 min		
Power Consumption	Under 2W		
Mounting	35mm Din Rail(D) or Panel(P)		
※ The run-up current of motor (starting current) does not cause relay trip because overcurrent protection of EOCR is not applied during motor run-up time			

Typical Application



Ordering Information

EOCR-SS-05 N-220

① ② ③ ④

① MODEL : Electronic Over Current Relay

② Current Range

③ N : Relay energized in control power applied.
R : Relay de-energized in control power applied.

④ Control Voltage